

CLAIMS

We Claim

1. In a system comprising a virtual machine manager process for managing
5 operation of virtual machines, a method of performing unit tests on a specified plurality
of the virtual machines, the method comprising:
receiving instructions to configure a network of virtual machines
comprising the specified plurality of virtual machines;
based on the instructions to configure the network of virtual machines,
10 configuring the network by launching the specified plurality of virtual machines;
executing a test program to invoke execution of selected units of code of
a target program on the specified plurality of the virtual machines; and
verifying that actual results of the execution of selected units of code
matches expected results.
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2. The method of claim 1 wherein the network of virtual machines is
configured by creating at least one host computer object and a plurality of virtual
machine objects associated with the at least one host computer object.
- 20 3. The method of claim 1 wherein the virtual machine manager invokes the
execution of selected units of code of the target program by issuing remote invocation
method calls addressed to the specified plurality of virtual machines and specifying at
least one unit of code of the targeted program to be executed by the specified plurality
of virtual machines.
- 25 4. The method of claim 1 wherein the specified plurality of virtual
machines are configured on a plurality of host computers.

5. The method of claim 1 wherein the invocation of execution of selected units of code of the target program is asynchronous.

6. The method of claim 1 further comprising, receiving an exception object
5 indicative of an error in execution of at least one of the selected units of code of the targeted program.

7. The method of claim 6 wherein the exception object further specifies at least one of the specified plurality of virtual machines on which the error in execution
10 occurred.

8. A system for performing unit tests of selected units of code on a specified plurality of the virtual machines, the system comprising:
a virtual machine manager for configuring a network of virtual machines
15 comprising the specified plurality of virtual machines for conducting unit tests of selected units of code of target programs; and
a test program file to be executed by the virtual machine manager and comprising instructions for invoking execution of the selected units of code of the target program on the specified plurality of the virtual machines.

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9. The system of claim 8 wherein the instructions for invoking execution of the selected units of code of the target program on the specified plurality of the virtual machines comprises remote invocation calls to the specified plurality of virtual machines.

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10. The system of claim 8 wherein the specified plurality of virtual machines are configured on a plurality of host computers.

11. The system of claim 8 wherein the virtual manager is further operative for receiving an exception object indicative of an error in execution of at least one of the selected units of code of the targeted program and determining at least one of the specified plurality of virtual machines on which the exception causing error occurred.

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12. The system of claim 8 wherein the virtual machine manager is further operative for responding to instructions specifying invocation of execution of the selected units of code of the target program in a asynchronous manner.

10 13. At least one computer readable medium having stored thereon computer-executable instructions related to performing unit tests of selected units of code of a target program on a specified plurality of virtual machines, the instruction comprising:
input parameters representing units of code selected for execution on the specified plurality of virtual machines; and

15 executable software for receiving the input parameters, executing the units of code selected for execution on the specified plurality of virtual machines and in response to a failed execution of at least one of the selected units of code, generating exception objects indicative of at least one of the specified plurality of virtual machines on which the failure occurred.

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14. The computer readable medium of claim 13, wherein the units of code selected for execution on the specified plurality of virtual machines are represented in the input parameters as methods of a virtual machine object.

25 15. The computer readable medium of claim 13 wherein the exception object comprises a stack trace indicative of the at least one of the specified plurality of virtual machines on which the failure occurred.